

## DESCRIPTION OF AN INSECT CONTAINER FOR A TRAPLIGHT.

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While operating a series of traplights for the Tomato Fruit Worm (*Heliothis obsoleta* Fabr.) Project of the Ohio Agricultural Experiment Station at Marietta, Ohio, the writer had the experience of sometimes capturing nearly 3 pounds of insects at some of the traps<sup>1</sup> in one night. Most of these insects were the caddis fly *Potomyia flava* Hagen.<sup>2</sup> Of course, ordinary 2-quart jars were not adequate for such captures. Also, when any quantity of insects was trapped in the cyanide jars there was a very poor kill and specimens were battered so that they could not be identified.

De Gryse<sup>3</sup> used a water-pail container instead of a cyanide jar. However, this type is complex to make and specimens are apt to become wet in it.

At Marietta the cyanide jars were replaced by 50-pound lard cans charged with carbon bisulfide. The can was equipped as follows: A chute for connecting it with the trap hopper was made from a cylinder of tin  $2\frac{1}{2}$  inches in diameter and about 8 inches long. This was fitted into a hole in the center of the lard can lid which was made by cutting a circular area the diameter of the chute into triangular segments and bending them upward at right angles to the lid surface (A, fig. 1). The cylinder was pushed upward through the hole thus made so that it projected  $\frac{1}{2}$  inch above the lid surface (B, fig. 1). The triangular segments of the lid were secured to the cylinder by means of nail holes punched through the two metal surfaces. Finally, to prevent the cylinder from slipping, a piece of baling wire (C, fig. 1) was inserted through opposite holes and the ends bent against the cylinder. Thus, a collar was formed which projected upward into the flange (D, fig. 1) of the trap hopper.

The lower portion of the cylinder projecting into the can was bent so that the insects fell into the container through an elbowed

<sup>1</sup> At mercury vapor H-4 and S-4 lamps furnished by L. C. Porter of the General Electric Company, Cleveland, Ohio.

<sup>2</sup> Determined by H. H. Ross, Illinois State Natural History Survey.

<sup>3</sup> De Gryse, J. J. 1934. Note on a new light trap. Sixty-fourth annual report of the Entomological Society of Ontario. 55-57. illus.

chute. This was done to prevent them from flying back out of the can to the light, as they sometimes did from cyanide jars.

The elbow was made by cutting two parallel slits (E, fig. 1)  $\frac{1}{2}$  inch apart on opposite sides of the cylinder, and about 2 inches was trimmed off the ends of the resulting narrow strips. The edges of the larger strips (F & G, fig. 1) were notched so that these sections could be bent parallel in a curve until the lower one extended across and beyond the mouth of the cylinder.

A waterspout elbow might be used as a chute.

A piece of  $\frac{1}{2}$ -inch mesh hardware cloth (I, fig. 1) was placed on baling wire supports (H, fig. 1) about halfway between the top and bottom of the can. This separated the larger insects from the smaller ones, which fell through the wire to the bottom of the can, and prevented the former from battering the latter. Crumpled newspaper was placed beneath the hardware cloth to absorb the moisture which might condense in the can and damage the insects on the bottom.

The carbon bisulfide was contained in a small tin can (J, fig. 1) which was wired to the side of the lard can, near the lid. This position ensured a high concentration of gas near the top as well as at the bottom of the lard can.

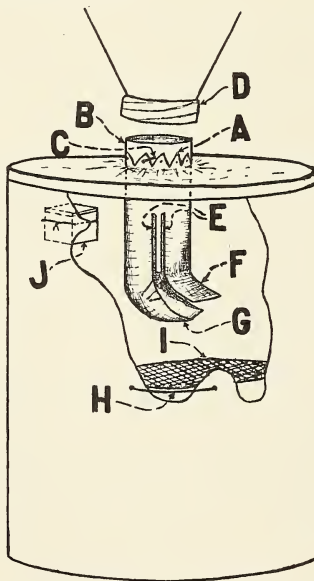


FIG. 1. The details of an insect container for a traplight.

The apparatus was charged each evening by pouring about 100 cc. of carbon bisulfide over a loose wad of cotton in the small tin can. A loosely fitting lid with four holes punched in it was put on the carbon bisulfide can to ensure a slow escape of gas.

The container was set under the trap on a platform nailed to the light pole at the proper distance from the ground.

This type of a killing vessel was cheaply made and simple to operate. All the specimens caught in it could be identified and many perfect ones were obtained. The placing of crumpled newspaper on the bottom of the can is necessary to ensure good results.

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### A NEW LOXANDRUS (COLEOPTERA, CARABIDAE) FROM CINCINNATI OHIO.

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#### *Loxandrus duryi* sp. nov.

Above black, strongly shining; elytra also strongly iridescent and with a medium sized rounded, sutural, rufous spot near the apex varying in extent over the posterior fourth to the posterior third of the elytra; thorax slightly rufescent along the middle one third of the basal margin; labrum and mandibles dark reddish brown; antennae dark brown, the tips of the joints more fuscous with the three basal joints being paler. Body beneath piceous, the coxae dark reddish brown, the legs pale brown throughout. Generally moderately convex, elongate and narrow. Head two thirds as wide as the thorax, not elongate, eyes very prominent. Thorax one third wider than long (♀), one fourth wider than long (♂), the sides regularly but moderately curved from base to apex, with the lateral margins narrowly reflexed and somewhat translucent basally; thorax as wide in front as behind, the front angles slightly rounded, the hind ones obtuse; apex not sinuate, the base finely margined on its lateral thirds; median line punctate, obsolete on basal fourth; pronotal foveae deep, narrow, attaining the base and sparsely but distinctly punctate, the punctures extending medially and laterally from the base of the foveae. Elytra one third wider than thorax, the humeral angles rounded, more so in the ♀; almost parallel, very gradually and evenly rounded to the apical third, then more acutely graduated to apex. Striae heavily impressed (♀), moderately so (♂), the seventh obsolete basally; intervals moderately convex. Length ♂ 7.2 mm and ♀ 7.5 mm; width, ♂ 2.9 mm and ♀ 2.9 mm.